STATE FOREST LAND ENVIRONMENTAL CHECKLIST

Purpose of Checklist:

The State Environmental Policy Act (SEPA), chapter 43.21C RCW, requires all governmental agencies to consider the environmental impacts of a proposal before making decisions. An environmental impact statement (EIS) must be prepared for all proposals with probable significant adverse impacts on the quality of the environment. The purpose of this checklist is to provide information to help you and the agency identify impacts from your proposal (and to reduce or avoid impacts from the proposal, if it can be done) and to help the agency decided whether an EIS is required.

Instructions for Applicants:

This environmental checklist asks you to describe some basic information about your proposal. Governmental agencies use this checklist to determine whether the environmental impacts of your proposal are significant, requiring preparation of an EIS. Answer the questions briefly, with the most precise information known, or give the best description you can. *Questions in italics are supplemental to Ecology's standard environmental checklist. They have been added by the DNR to assist in the review of state forest land proposals. Adjacency and landscape/watershed-administrative-unit (WAU) maps for this proposal are available on the DNR internet website at http://www.dnr.wa.gov under "SEPA Center." These maps may also be reviewed at the DNR regional office responsible for the proposal. This checklist is to be used for SEPA evaluation of state forest land activities.*

You must answer each question accurately and carefully, to the best of your knowledge. In most cases, you should be able to answer the questions from your own observations or project plans without the need to hire experts. If you really do not know the answer, or if a question does not apply to your proposal, write "do not know" or "does not apply." Complete answers to the questions now may avoid unnecessary delays later. All of the questions are intended to address the complete proposal as described by your response to question A-11. The proposal acres in question A-11 may cover a larger area than the forest practice application acres, or the actual timber sale acres.

Some questions ask about governmental regulations, such as zoning, shoreline, and landmark designations. Answer these questions if you can. If you have problems, the governmental agencies can assist you.

The checklist questions apply to all parts of your proposal, even if you plan to do them over a period of time or on different parcels of land. Attach any additional information that will help describe your proposal or its environmental effects. The agency to which you submit this checklist may ask you to explain your answers or provide additional information reasonably related to determining if there may be significant adverse impact.

Use of checklist for nonproject proposals:

Complete this checklist for nonproject proposals, even though questions may be answered "does not apply." IN ADDITION, complete the SUPPLEMENTAL SHEET FOR NON PROJECT ACTIONS (part D).

For nonproject actions, the references in the checklist to the words "project," "applicant," and "property or site" should be read as "proposal," "proposer" and "affected geographic area," respectively.

A. BACKGROUND

1. Name of proposed project, if applicable:

Timber Sale Name: Get It Done Timber Sale Agreement #: 30-076530

2. Name of applicant: Washington State Department of Natural Resources

3. Address and phone number of applicant and contact person:

Pacific Cascade Region Bud Clark P.O. Box 280 Castle Rock, WA 98611-0280

4. Date checklist prepared:

April 14, 2004

5. Agency requesting checklist:

Washington State Department of Natural Resources.

- 6. Proposed timing or schedule (including phasing, if applicable):
 - a. Auction Date: 2005
 - b. Planned contract end date (but may be extended): 2006
 - c. Phasing: Does not apply.
- 7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

<u>Timber Sale</u>

- a. Site preparation: If necessary, slash piles left following harvest may be burnt and a ground herbicide application may be applied to existing vegetation within the units in order to facilitate planting and reduce competition between tree seedlings and vegetation.
 - $b. \quad \textit{Regeneration Method: } \textbf{Hand plant with primarily Douglas-fir and/or natural regeneration.}$
 - c. Vegetation Management: If necessary, a ground herbicide may be applied to existing vegetation to reduce competition approximately 3-5 years after planting and/or the vegetation may also be hand-cut approximately 5-10 years after planting.

d. Thinning: Pre-commercial thinning may be necessary in the future. Thinning is not expected at this time.

<u>Roads</u>: Roads remaining at the termination of the sale will be used for future forest management activities such as administrative access, plantation assessments, and plantation maintenance when needed. Road maintenance and periodic ditch and culvert cleanout will occur as necessary. Future timber sales may use some of these roads for access. A harvest date has not been set for these future potential sales at this time.

Rock Pits and/or Sale: The L-3140 Rock Pit, a State owned rock source, might be redeveloped with the Get It Done proposal.

<u>Other:</u> Landing slash piles may be burned following the completion of logging activities and/or prior to reforestation. Firewood salvage may occur after logging operations

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

_ ..

$\boxtimes 303$ (d) – listed water body in WAU: \boxtimes temp \square sediment \square completed TMDL (total maximum daily load):
☐Landscape plan:
Watershed analysis:
☐Interdisciplinary team (ID Team) report:
⊠Road design plan: Available at the Pacific Cascade Region Office
☐Wildlife report:
Geotechnical report:
Other specialist report(s):
Memorandum of understanding (sportsmen's groups, neighborhood associations, tribes, etc.):
⊠Rock pit plan: Available at the Pacific Cascade Region Office
☑ Other: Final Forest Resource Plan (July 1992), Final Habitat Conservation Plan (September 1997), Forest Practice Rules,
DNR Planning and Tracking (P&T), and special and tabular data derived from slope stability models (Info. Tech. Division,
2002.)

- 9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.
- 10. List any government approvals or permits that will be needed for your proposal, if known.

⊠HPA Blanket Hydraulic Permit Application, Log Number ST-D9199-04 for cable tailholds, timber felling and yarding. ⊠ Burning permit □Shorelinepermit ⊠Incidental take permit 1168 and PRT-812521 ⊠FPA #:

- 11. Give brief, complete description of our proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include specific information on project description.)
 - a. Complete proposal description:

Approximately 109 acres were considered for harvest with the Get It Done Timber Sale. Of the 109 acres, approximately 77 net acres will be even-aged harvested within the proposal. Approximately two acres of leave tree clumps (eight ½ acre leave tree areas) will remain within the proposal along with two acres of existing road surface (L-3010 Road). Approximately 28 acres have been designated as Riparian Management Zones averaging 175 feet wide along five type 3 streams.

Approximately 7% of the original stand (eight trees per acre) will remain as retention trees. Eight $1\4$ acre clumps will be left scattered and clumped within harvest portions of the unit.

<u>Estimated net harvest acres:</u> (**Get It Done Timber Sale area**):

The net timber sale harvest area is approximately 77 acres of regeneration harvest.

<u>Largest Unit:</u> 81 acres (77 net acres of regeneration harvest, 2 acres of total leave tree areas, and 2 acres of existing road surface within sale boundaries).

Estimated Volume: 3.0 mmbf

 $\underline{Rock\ Source:}\ Rock\ for\ this\ proposal\ may\ come\ from\ the\ L-3140\ Pit,\ a\ State\ owned\ quarry,\ and/or\ may\ come\ from\ an\ approved\ commercial\ source.$

b. Timber stand description pre-harvest (include major timber species and origin date), type of harvest, overall unit objectives.

Pre-harvest description

This stand is primarily Douglas-fir with approximately 6% red alder and bigleaf maple scattered throughout the unit. The stand is approximately 55- to 75-years-old. Understory vegetation is primarily sword fern with some vine maple, salal, and Oregon grape scattered throughout the stand.

Type of Harvest

This proposal is a regeneration harvest of 77 acres, which does not include approximately 2 acres of leave tree clumps (eight ¼ acre leave tree clumps) within the unit. Approximately 70% will be harvested with ground-based systems and approximately 30% with cable systems.

Overall Unit Objective:

Harvest objectives for this proposal are to provide revenue for trust beneficiaries through sustainable forestry while meeting the obligations of the Forest Practices rules and the DNR's HCP. Specific objectives include the protection of streams (water quality and fish habitat), provision of retetention trees, and minimization of impacts to soils.

c. Road activity summary. See also forest practice application (FPA) for maps and more details.

	How	Length (feet)	Acres	
Type of Activity	Many	(Estimated)	(Estimated)	Fish Barrier Removals (#)
Construction		3,978	2	0
Reconstruction		1,508		0
Abandonment		0	0	0
Bridge Install/Replace	0			0
Culvert Install/Replace (fish)	0			0
Culvert Install/Replace (no fish)	7			

- 12. Location of proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist. (See timber sale map. See also color landscape/WAU map on the DNR website http://www.dnr.wa.gov under "SEPA Center.")
 - a. Legal description:

Sections 33 and 34, Township 14 North, Range 5 West, W.M.

b. Distance and direction from nearest town (include road names):

Get It Done Timber Sale is located 3.1 miles by road north of Dryad, WA. From State Route 6, go 1.2 miles on Chandler Road. Turn off Chandler Road onto the L-3000 Road. Travel approximately 0.6 miles and turn left onto the L-3100 Road, and travel 1.3 miles to the L-3110 Road.

c. Identify the watershed administrative unit (WAU), the WAU Sub-basin(s), and acres. (See also landscape/WAU map on DNR website http://www.dnr.wa.gov under "SEPA Center.")

WAU Name	WAU Acres	Proposal Acres
Curtis	44, 976	109 Get It Done Timber Sale

Sub-basin acres are unknown.

13. Discuss any known future activities not associated with this proposal that may result in a cumulative change in the environment when combined with the past and current proposal(s). (See digital ortho-photos for WAU and adjacency maps on DNR website http://www.dnr.wa.gov under "SEPA Center" for a broader landscape perspective.)

This proposal is located within the Curtis WAU. Agriculture and home sites are located in the valleys near the major streams with some home sites located in the uplands. There appears to be a recent trend towards increasing conversion of agriculture and forestry lands to home sites in the low- to mid-elevations. The uplands are primarily managed for timber production. Ownership includes large industrial forests, small private forests, and DNR managed forests. Forest stands within the WAU appear to be almost exclusively second and third growth stands. A 1990 aerial photo indicates that many of the stands on private lands within the WAU were regeneration harvested in the 1970's and 1980's. The number of Forest Practices shown on the WAU map (referenced above on the DNR website) along with observations within the WAU indicate the remaining second growth timber stands are intensively managed. Management includes regeneration harvests, thinnings, and partial cuts.

The following table is an estimated summary of past and future activity on DNR-managed land and privately-managed land in the WAU (information is based off of Forest Practices applications that have been approved in the last seven years as of June 18, 2003 compiled by the Department's GIS database). No attempt was made to predict future timber harvest on private ownerships within the WAU. The source of this information only provided the acreage on the WAU level. Approximately 66% of the land managed by the DNR in the Curtis WAU is covered with vegetation greater than 25-years-old.

Curtis	WAU ACRES	ACRES OF	ACRES OF	PROPOSED	PROPOSED
WAU		EVEN-AGED	UNEVEN-AGED	EVEN-AGED	UNEVEN-AGED
		HARVEST	HARVEST	HARVEST IN	HARVEST IN
		WITHIN THE	WITHIN THE	THE FUTURE	THE FUTURE
		LAST SEVEN	LAST SEVEN	(FY 2004/2005)	(FY 2004/2005)
		YEARS	YEARS		
DNR MANAGED	8,146 (18%)	556	197	324	285
LAND					
PRIVATE	36,830	4666	1069	UNKNOWN	UNKNOWN
OWNERSHIP					
TOTAL	44,976	5222	1266	UNKNOWN	UNKNOWN

Areas on the Harvest Unit Adjacency Map marked as "Unknown" where planted at different times ranging from 1974 through 1998. A regeneration harvest unit that was planted in 2001 (approximately 54 acres) that is located a quarter mile east of the Get It Done Timber Sale called, Tractor Trail located in Section 33, Township 14 North, Range 5 West, W.M. There are two regeneration harvest units that were planted in 2004 (approximately 58 acres) approximately a quarter mile northeast of the proposal called Quick Quarter located in Section 35, Township 14 North, Range 5 West, W.M. Approximately one mile north is a regeneration harvest unit that was planted in 2001 (approximately 70 acres) located in the south half of Section 28, Township 14 North, Range 5 West, W.M. named Chaos. A timber sale called Ramp-Up may be harvested within the next three years. The proposed sale is approximately 1.5 and 2.0 miles north to northeast of the proposal. None of the private timber ownership to the south of the proposal has an approved even-aged harvest FPA.

The DNR has an HCP agreement with the federal government concerning threatened and endangered species and their habitats, which requires the Department to manage landscapes in a conservative manner. This agreement substantially helps the Department to mitigate for harmful cumulative effects related to its management activities. The HCP is designed to protect and promote fish and wildlife species and their habitats over a broad regional area. The applicable HCP strategies incorporated into this proposal are as follows:

- Retaining an average of eight leave trees per acre scattered and clumped throughout the unit.
- Analyzing, designing, and constructing a road system to minimize effects on the environment.
- Designating Riparian Management Zones averaging 175 feet wide along five type 3 streams.

The strategy of retaining an average of eight leave trees per acre in the regeneration harvest area provides legacy elements for recruitment of future snags, coarse woody debris, multi-layered stands, and large diameter trees. In combination, these features will provide elements of older forest habitat characteristics within the third growth stand. By managing to develop older forest characteristics, habitats will be provided for wildlife species dependent on older forest habitat. Finally, road system analysis and design required under the Forest Practices RMAP process will improve roads and minimize road impacts on the environment. The south fork of the Chehalis River is 1.5 downstream from the Get It Done Timber Sale. The downstream segments are listed on the state 303d list as not meeting water temperature parameters. Measures such as retaining RMZs within the proposal should reduce the possibility of negatively influencing water temperature parameters.

In addition to mitigation efforts incorporated into this proposal under the HCP and Forest Practices RMAP process, DNR will include contract language in this proposal to meet legal requirements of Forest Practices and Department of Ecology regarding sediment delivery to streams. This language addresses timing of operations, restrictions on impacts to soils (compaction/rutting), and requirements for sediment control devices and techniques.

B.	ENVIR	ONMENT	AL EI	EMENTS

1	Farth

a.	General	description	of the	site (che	eck one):

☐Flat, ☐Rolling, ☑Hilly, ☐Steep Slopes, ☐Mountainous, ☐Other:

1) General description of the WAU or sub-basin(s) (landforms, climate, elevations, and forest vegetation zone).

The Curtis WAU ranges from flat river-adjacent agricultural land mostly around the towns of Doty and Curtis in the central portions to the mostly rolling, moderately dissected flanks of the dominant ridge systems occupying the NW and SE portions of the WAU. Elevation ranges from 200 feet in the flats to over 2,300 feet in the hills. The Get It Done Timber Sale is approximately 80% under 30% slopes and approximately 20% between 30% and 50% slope. The steeper slopes tend to be in the northwest portion of the WAU. The WAU averages 70 inches of rainfall per year. The major timber type is Douglas-fir/red alder, approximately 50- to 70-years-old. The Chehalis River flows from west to east through the WAU, joining with the South Fork of the Chehalis before leaving the WAU. The proposal is within the western hemlock forest vegetation zone.

2) Identify any difference between the proposal location and the general description of the WAU or sub-basin(s).

This proposal fits the general WAU description above. The unit is within the rolling hills on the flanks of the ridge system in the southeast portion of the WAU.

b. What is the steepest slope on the site (approximate percent slope)?

The steepest slope on the site is approximately 65%.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland. Note: The following table is created from state soil survey data. It is a roll-up of general soils information for the soils found in the entire sale area. It is only one of several site assessment tools used in conjunction with actual site inspections for slope stability concerns or erosion potential. It can help indicate potential for shallow, rapid soil movement, but often does not represent deeper soil sub-strata. The actual soils conditions in the sale area may vary considerably based on land-form shapes, presence of erosive situations, and other factors. The state soil survey is a compilation of various surveys with different standards.

State Soil	Soil Texture	% Slope	Acres	Mass Wasting	Erosion
Survey #				Potential	Potential
1008	LOAM	8-30	78	LOW	MEDIUM
0650	SILT LOAM	30-65	3	MEDIUM	MEDIUM

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.
 - 1) Surface indications:

There were no indicators of shallow or deep-seated failures within the sale area. However, there are indicators (hollows, convergent slopes, and over-steepened slopes) within a half-mile radius of the proposal. In the inner-gorge of the central and northern type 3 streams and lower portion of contributory type 5 stream, there appeared to be some evidence of slow soil movement due to under cutting of the creeks channel during high levels of precipitation events.

2) Is there evidence of natural slope failures in the sub-basin(s)?

□No ⊠Yes, type of failures (shallow vs. deep-seated) and failure site characteristics:

There is evidence of natural slope failures in the Curtis WAU. Large deep-seated landslides occur within the hills of the northwest and southeast portions of the WAU. These deep-seated landslides are mostly subdued by erosion and thus, considered dormant. However, in some places portions of the deep-seated slides may be active although evidence indicates the rate of movement is usually slow. Locally, shallow failures are superposed on the dormant and active portions of the deep-seated slides. Shallow failures occur as debris slides, slumps, and earthflows mostly on the steeper convergent slopes on the scarps or toes of the deep-seated slides and on the where confined draws have particularly steep slopes.

3) Are there slope failures in the sub-basin(s) associated with timber harvest activities or roads? □No ☑Yes, type of failures (shallow vs. deep-seated) and failure site characteristics: Associated management activity:

There are slope failures associated with road construction within Curtis WAU, but these are primarily on older roads constructed without adequate drainage structures on steep, convergent mid-slopes. Most of these roads have been identified and will be scheduled for upgrades or abandonment in accordance with the Forest Practices Forest and Fish regulations. However, there are no-known road failures within one-mile radius of state owned land adjacent to the Get It Done Timber Sales.

4) Is the proposed site similar to sites where slope failures have occurred previously in the sub-basin(s)?
□No ⊠Yes, describe similarities between the conditions and activities on these sites:

The inner-gorge of the central and northern type 3 streams and lower portion of contributory type 5 stream, appear to have some evidence of slow soil movement due to under cutting of the creeks channel during high levels of precipitation events. These changes to the channels and soil movements within the proposal area are similar to other changes to the channels within the WAU.

5) Describe any slope stability protection measures (including sale boundary location, road, and harvest system decisions) incorporated into this proposal.

The following slope stability protection measures will be incorporated into the Get It Done Timber Sale proposal:

- Revegetating cut and fill slopes on newly constructed and/or reconstructed roads.
- Controlling drainage through the use of adequate number and size cross-drain culverts.
- Designating Riparian Management Zones averaging 175 feet wide along five type 3 streams within the proposal.
- Retaining an average of eight leave trees per acre scattered and clumped throughout the units and in headwalls of three type 5 streams.
- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

Approx. acreage new roads: 2 acres

Approx. acreage new landings: 1 acre

Fill source: Native soil along with rock to back fill over installed culverts. Roads to be constructed in both proposals are balanced cut and fill.

Grading will occur with new road construction and reconstruction. Filling will occur over new culvert installations during road construction and reconstruction. Material will be native soil from the new road construction location. Ballast and surface rock will be from the L-3140 Pit, a State owned quarry, and/or may come from an approved commercial source.

Fill quantities are estimated to average less than 20 cubic yards per culvert.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

 $Yes, minimal\ erosion\ may\ occur\ as\ the\ result\ of\ road\ construction, road\ use, and\ logging\ operations.$

g. About what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)? *Approximate percent of proposal in permanent road running surface (includes gravel roads):*

 $Less\ than\ 3\%\ of\ the\ site\ will\ be\ covered\ with\ impervious\ surfaces\ in\ the\ form\ of\ gravel\ roads\ during\ harvest\ activities.$

h. Propose measures to reduce or control erosion, or other impacts to the earth, if any: (Include protection measures for minimizing compaction or rutting.)

Road construction will be on ridges or on side slopes less than 45%. Prohibiting road construction between September 30 and May 1 unless authorized by the Contract Administrator. Suspending the hauling of wood products if rutting exceeds four inches on roads. New and reconstructed roads and drainage systems will be properly designed, constructed, and maintained in order to reduce the diversion, concentration, and inappropriate discharge of runoff. The drainage system will incorporate sediment traps, well-defined ditches, and culverts that will discharge water onto the forest floor to reduce the potential for sediment delivery to surface waters.

Landings and retention trees will be positioned in locations to help divert felling and yarding away from flowing waters. Lead end suspension will be required on all cable settings. Yarding may be suspended at the discretion of the Contract Administrator when soil rutting exceeds four inches as measured from the natural ground line when there is potential for damage to any public resource. If yarding is suspended, the Contract Administrator must be assured that future harvest operations will not potentially damage any public resource. To reduce potential damage to the earth, the Contract Administrator may require water bars to be constructed by hand and grass seed to be placed on exposed soils. Any and/or all operation(s) of this sale may be temporarily suspended when, in the opinion of the Contract Administrator, there is the possibility of sediment being delivered to any flowing water tributary to any fishbearing stream.

Retention trees along some of the type 5 streams and headwalls will protect stream bank integrity and reduce the potential for sediment delivery. Approximately eight .25-acre clumps will be left in the Get It Done Timber Sale. Approximately 20% of these leave trees are located in areas that will protect streams.

See B.1.d.5.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust *from truck traffic, rock mining, crushing or hauling*, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Minimal amounts of engine exhaust from logging equipment, log trucks, and automobile exhaust will be emitted as a result of the this proposal. If slash is burned, smoke will be emitted into the air.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

No.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

Slash, if burned, will be burned in accordance with the State's Smoke Management Program. A burn permit will be obtained before burning occurs.

3. Water

- a. Surface:
 - 1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into. (See timber sale map and forest practice base maps.)

There are seven type 5 streams, and five type 3 streams within the vicinity of this unit. One of the type 5 streams is in the central part of the proposal and changes into a type 3 stream that flows north to south. This stream drains into another unnamed type 3 streams and eventually drains into the Chehalis River down stream approximately 1.5 miles. There is a type 5 stream that changes to a type 3 stream located in the northeast corner and parallels the L-3100 Road flowing north to east. This stream drains into the Chehalis River approximately 2.5 miles down stream. A type 5 stream changes into a type 3 stream and drains into the above type 3 stream. This stream flows west to east. In the southeast corner of the proposal are two type 5 streams that change into type 3 streams and connect down stream. These flow north to south and drain into the Chehalis River approximately 1.5 miles down stream. There is a small type 5 stream outside of the harvest area that connects to the most easterly type 3 stream. Finally, an additional type 5 stream within the unit that connects to the central located type 3 stream.

a) Downstream water bodies:

The south fork of the Chehalis River is approximately 1.5 miles downstream of this proposal.

 $b) \qquad \textit{Complete the following riparian \& wetland management zone table:}$

Wetland, Stream, Lake,	Water Type	Number	Avg RMZ/WMZ Width in
Pond, or Saltwater Name		(how many?)	Feet (per side for streams)
(if any)			
Stream	5	7	0
Stream – all flow directly	3	5	175
or indirectly into the			
Chehalis River			

 List RMZ/WMZ protection measures including silvicultural prescriptions, road-related RMZ/WMZ protection measures, and wind buffers.

Approximately twenty-eight acres of RMZs averaging 175 feet wide along five type 3 streams have been bounded out of the harvest area.

All of the type 3 streams have well-defined channels that average 2-10 feet wide. However, no wind buffer will be retained due to the lack of blowdown along these streams and in the surrounding area.

Equipment Limitation Zones will be utilized along all type 5 streams as stated in the Forest Practices rules.

Will the project require any work over, in, or adjacent to (within 200 feet) to the described waters? If yes, please describe and attach available plans.

□No ☑Yes (See RMZ/WMZ table above and timber sale map.)
Description (include culverts):

Tailhold cables will hang across type 3 and 5 streams within the proposal area to facilitate logging. Harvesting and yarding will occur approximately 175 feet away from five type 3 streams. Harvesting and yarding will occur within 200 feet of or immediately adjacent to seven type 5 streams. In addition, there will be 30-foot-wide Equipment Limitation Zone restriction along all type 5 streams as required by Forest Practices.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

Less than 20 cubic yards of native material or rock per culvert. Rock may come from the L-3140 Rock Pit, a State owned rock pit, or rock may come from an approved commercial source.

4)	Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known. (<i>Include diversions for fish-passage culvert installation.</i>) No Yes, description:
5)	Does the proposal lie within a 100-year floodplain? If so, note location on the site plan. ⊠No ☐Yes, describe location:
6)	Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge. No Yes, type and volume:
	Minor amounts of logging slash may enter seven type 5 streams.
7)	Does the sub-basin contain soils or terrain susceptible to surface erosion and/or mass wasting? What is the potential for eroded material to enter surface water?
	Soil maps of the Curtis WAU indicate that approximately 1% of the WAU contains highly erodible soils and/or soils susceptible to mass wasting. However, 99% of the WAU contains soils with medium erosion potential. Eroded material enters the streams during moderate to high flows and can be observed as a noticeable increase in stream turbidity. The increased turbidity can be observed in streams originating in mature stands with no forest practice activity. The potential for eroded material to enter surface water based on this proposal is low due to the erosion control measures being included in the proposal. See B.1.h. and B.1.d.5.
8)	Is there evidence of changes to the channels in the WAU and sub-basin(s) due to surface erosion or mass wasting (accelerated aggradations, erosion, decrease in large organic debris (LOD), change in channel dimensions)? No Xyes, describe changes and possible causes:
	Historically, large areas of the landscape (~100's of acres) were harvested within a short period of time. This harvest activity may have previously increased surface erosion and mass wasting events within the WAU. These events may caused changes to the stream channels such as accelerated aggradations, erosion, channel dimensions, and channel movement over time. These lands were previously owned by private landowners and private timber companies.
9)	Could this proposal affect water quality based on the answers to the questions 1-8 above? $\square No \ \boxtimes Yes$, explain:
	By implementing the Department's HCP and following Forest Practices rules, the proposal is expected to have minimal to no effect on water quality. The RMZs described in B.3.c. should maintain stream function. Retention trees along portions of three type 5 streams will maintain stream bank integrity, provide shade, and recruit LWD.
10)	What are the approximate road miles per square mile in the WAU and sub-basin(s)? Are you aware of areas where forest roads or road ditches intercept sub-surface flow and deliver surface water to streams, rather than back to the forest floor? No Yes, describe:
	DNR managed lands has 3.8 road miles/square mile, non-DNR managed land has 4.8 miles/square mile, the average for the WAU is 4.6 miles/square mile. On DNR managed land there are few areas where ditches intercept sub-surface flow and deliver surface water to streams. This is a result of DNR upgrading roads through the Forest Practices RMAP requirements. Older roads that may be intercepting and delivering water have been scheduled for upgrades or abandonment.
11)	Is the proposal within a significant rain-on-snow (ROS) zone? If not, STOP HERE and go to question B-3-a-13 below. Use the WAU <u>or</u> sub-basin(s) for the ROS percentage questions below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below. Solution Stop HERE and go to question B-3-a-13 below.
12)	If the proposal is within the significant ROS zone, what is the approximate percentage of the WAU or subbasin(s) within the significant ROS zone (all ownerships) that is (are) rated as hydrologically mature?
13)	Is there evidence of changes to channels associated with peak flows in the WAU <u>or</u> sub-basin(s)? \square No \square Yes, describe observations:
	There is evidence of changes to channels associated with peak flows. Changes observed include: undercutting of stream adjacent banks, slumping within inner-gorges and headwalls, and sediment deposition within the WAU.
14)	Based on your answers to questions B-3-a-10 through B-3-a-13 above, describe whether and how this proposal, in combination with other past, current, or reasonably foreseeable proposals in the WAU and sub-basin(s), may contribute to a peak flow impact.

Form Rev. July 3, 2003

This proposal may slightly change the timing, duration, and amount of water in a peak flow event. Flow rates may increase slightly during low and high flow periods due to decreased transpiration and

interception. These increased peak flows are thought to have resulted in incision of some streams and tributaries and deposition beyond the hills in the broad valley flats. However, the relatively small unit sizes, location (not in the rain-on-snow zone), RMZs and Forest Resource Plan green-up policies should limit contributions to peak flows. See B.3.a.16.

	15)	Is there water resource (public, domestic, agricultural, hatchery, etc.), or area of slope instability, down. or downslope of the proposed activity that could be affected by changes in surface water amounts, qualit movements as a result of this proposal? ⊠No □Yes, possible impacts:	
	6)	Based on your answers to questions B-3-a-10 through B-3-a-15 above, note any protection measures add possible peak flow/flooding impacts.	dressing
		The following measures will address possible peak flow/flooding impacts:	
		 Avoiding diversion and concentration of runoff as well as increasing the number of cross dr which would allow for better dispersal of associated discharge. Designating RMZs averaging 175 feet wide along five type 3 streams. 	
		3. Limiting regeneration harvest unit size to less than 100 acres and following Forest Resource green-up policies before harvesting adjacent DNR stands. The Get It Done Timber Sale has area is 81 acres.	
b.	Ground W	? r .	
	1)	Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.	
		Ground water will not be withdrawn or discharged. However, it is likely that subsurface flow will intercepted during road construction. This will be diverted back to the forest floor by using frequences of the construction of	ent ome
	2)	Describe waste material that will be discharged into the ground from septic tanks or other sources, if any example: Domestic sewage; industrial, containing the following chemicals; agricultural; etc.). Describe to general size of the system, the number of such systems, the number of houses to be served (if applicable) number of animals or humans the system(s) are expected to serve.	he
		Insignificant amounts of oil and other lubricants could be discharged inadvertently as a result of hequipment use. Spills will be required to be contained and cleaned-up.	eavy
	3)	Is there a water resource use (public, domestic, agricultural, hatchery, etc.), or area of slope instability, downstream or down slope of the proposed activity that could be affected by changes in groundwater am timing, or movements as a result this proposal? No □Yes, describe:	
		a) Note protection measures, if any.	
c.	Water Rur	f (including storm water):	
	1)	Describe the source of runoff (including storm water) and method of collection and disposal, if any (including quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.	
		Storm water runoff will be collected by road ditches and diverted through cross drain culverts onte forest floor. Culverts will be placed at a location to minimize the amount of water runoff directly existing stream channels. Small amounts of ditch water may directly enter into streams.	
	2)	Could waste materials enter ground or surface waters? If so, generally describe.	
		Some logging slash may enter seven type 5 streams within the proposal.	
		a) Note protection measures, if any.	
		Equipment use will be limited along streams in accordance with Forest Practices rules. Concentrations of logging slash will be removed from flowing streams. No lubricants will be disposed of on site. See 3.a.1.c.	e
d.		easures to reduce or control surface, ground, and runoff water impacts, if any: water, ground water, and water runoff sections above, questions B-3-a-1-c, B-3-a-16, B-3-b-3-a, and B-	·3-c-2-a.)
	See B.1.h.	nd B.1.d.5.	
Plants			
a.	Check or o	cle types of vegetation found on the site:	
	⊠evergre	tree: \alder, \and maple, \square aspen, \alder cottonwood, \square western larch, \square birch, \square other: tree: \alder Douglas-fir, \alder grand fir, \square Pacific silver fir, \square ponderosa pine, \square lodgepole pine, \alder western hemlock, \square mountain hemlock, \square Englemann spruce, \square Sitka spruce, \alder red cedar, \square yellow cedar, \square other: \alder huckleberry, \alder salmonberry, \alder salal, \square other:	
	⊠grass □pasture		
	☐water p ☐other ty	ain lants:	

4.

b. What kind and amount of vegetation will be removed or altered? (See answers to questions A-11-a, A-11-b, B-3-a-1-b and B-3-a-1-c. The following sub-questions merely supplement those answers.)

Approximately 92% of the overstory vegetation will be removed from the 81-acre sale area. Vegetation will not be altered or removed from RMZs.

1) Describe the species, age, and structural diversity of the timber types immediately adjacent to the removal area. (See landscape/WAU and adjacency maps on the DNR website at: http://www.dnr.wa.gov under "SEPA Center")

The adjoining vegetation to the south is an approximately 20 -year-old Douglas-fir plantation that ranges from 12 to 14 inches dbh. To the west is a 15-year-old Douglas-fir plantation that ranges from 10 to 14 inches dbh. To the north is a 22-year-old Douglas-fir plantation that ranges from 10 to 16 inches dbh. To the east is a Douglas-fir plantation stand of 7-year-old Douglas-fir.

This proposal is within the western hemlock zone. It is located at the medium elevations of this zone, therefore Douglas-fir is more predominant. There are scattered western red cedar and grand fir growing in the older stands. The understory is primarily sword fern, salal and vine maple with lesser amounts of other species (see B.4.a.).

2) Retention tree plan:

Approximately eight trees per acre (a total of 648 trees) will be retained within the regeneration portion of the harvest unit. Retention trees in small clumps of 3-40 trees along with individually scattered leave trees will be left in the harvest unit. There are eight .25-acre clumps that will be left within the unit.

c. List threatened or endangered *plant* species known to be on or near the site.

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
NONE FOUND				

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Douglas-fir will be planted after harvest or will be allowed to regenerate naturally. Approximately eight leave trees per acre will be left clumped and scattered in regeneration harvest portions of the units.

Circle or check any hirds animals or unique habitats which have been observed on or near the site or are known to be on or

5. Animal

a.	near the site:
	birds: \[hawk, \[heron, \[heagle, \[songbirds, \[pigeon, \[other: Spotted Owl mammals: \[deer, \[deer, \[deer, \] bear, \[deer, \[deer, \] beaver, \[other: fish: \[bass, \[salmon, \[deer, \] herring, \[shellfish, \[deer, \] other: sculpin unique habitats: \[talus slopes, \[caves, \[cliffs, \] oak woodlands, \[balds, \[mineral springs \]
b.	List any threatened or endangered species known to be on or near the site (include federal- and state-listed species).

TSU Number	FMU_ID	Common Name	Federal Listing Status	WA State Listing Status
NONE FOUND				

The proposal lies within a status 4 spotted owl circle and is located approximately 0.23 to 1.71 miles from the site center. The Federal listing status is "threatened". The State listing status is "endangered". The proposal is consistent with the Departments HCP. Status 4 owl circles have no regulatory or HCP protection requirements.

This proposal lies within the range of the federally listed bull trout and its habitat.

c.	Is the site part of a migration route? If	so, explain.	
	⊠Pacific flyway	\square Other migration route:	Explain if any boxes checked:

This proposal is located in the Pacific flyway, which is part of the Pacific Northwest forests. Many Neotropical birds are closely associated with riparian areas, cliffs, snags and structurally unique trees in these forests. Riparian areas and special habitats are protected through implementation of DNR's Habitat Conservation Plan. Migratory waterfowl also use the Pacific flyway; the area for this proposal is not generally the type of area used for resting or feeding by migratory waterfowl.

d. Proposed measures to preserve or enhance wildlife, if any:

By designing this sale to comply with the State's HCP, wildlife and wildlife habitat will be retained. A total of 648 retention trees will be left within the Get It Done Timber Sale. Retention trees serve as perches and nest sites. Trees left along flowing waters are conducive to water quality and serve as protection areas for wildlife habitat. Retention trees in clumps will remain in the proposal area to serve as ecological niches for wildlife. Larger diameter trees that have large limbs, open crowns, and broken tops will be left to preserve current habitat needs and provide future habitat opportunities for many species. These trees will become snags and retention trees in future generations. The trees left in the proposal will provide riparian functions by possibly maintaining shade and bank stability. Riparian Management Zones averaging 175 feet wide along five type 3 streams in the Get It Done proposal will maintain water quality; provide migratory corridors for wildlife; and maintain habitat for fish, reptiles, and other riparian obligate species. The following activities will be completed after harvest to enhance habitat opportunities: (1) large woody material such as large logs or logging slash will be scattered or piled throughout the proposal; and (2) Riparian Management Zones averaging 175 feet adjacent to five type 3 streams.

1) Note existing or proposed protection measures, if any, for the complete proposal described in question A-11.

See B.5d. above.

Species/Habitat: bull trout

Protection Measures: Streams characterized as having bull trout habitat have been bounded out of the harvest area. Riparian Management Zones averaging 175 feet wide adjacent to five type 3 streams should provide habitat for bull trout and other fish.

Species/Habitat: upland species

Protection Measures: DNR's HCP Multi-species Conservation Strategy for Unlisted Species and Minimization and Mitigation for other Federally Listed species strategies also provide management prescriptions for habitat protection of many upland wildlife species (such as not harvesting potential marbled murrelet habitat) as well as riparian dependent species. These strategies require the DNR to manage forestland for uncommon habitats (talus, caves, cliffs, oak woodlands, large snags, and structurally unique trees), which are habitats conducive to upland wildlife, spotted owls, and marbled murrelets.

6. Energy and Natural Resources

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Does not apply.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

Does not apply.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Does not apply.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Minimal amounts of oil and other lubricants may accidentally discharge during heavy machinery operation.

1) Describe special emergency services that might be required.

There are not any special emergency services required at this time. Pump trucks and/or pump trailers will be required on site during fire season. In the event of a lubricant spill, the Purchaser shall contact the DNR and the Department of Ecology and begin immediate containment and clean up of the spill.

2) Proposed measures to reduce or control environmental health hazards, if any:

There are not any special emergency services required at this time. Pump trucks and/or pump trailers will be required on site during fire season. In the event of a lubricant spill, the Purchaser shall contact the DNR and the Department of Ecology and begin immediate containment and clean up of the spill. No oil or lubricants will be disposed of on site. The cessation of operations may occur during periods of time when the risk of fire may increase. Fire tools and equipment will be kept on site during fire season.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Does not apply.

2) What types and levels of noise would be created by or associated with the project on a short-term or long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from this site.

Minimal noise levels associated with logging operations and truck traffic will be created with the project no longer than a two-year period. No long-term impacts.

3) Proposed measures to reduce or control noise impacts, if any:

None.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties? (Site includes the complete proposal, e.g. rock pits and access roads.)

Timber production and forest management activities.

b. Has the site been used for agriculture? If so, describe.

No.

c.	Describe ar	ny structures on the site.
	None.	
d.	Will any str	ructures be demolished? If so, what?
	No.	
e.	What is the	current zoning classification of the site?
	Forestry.	
f.	What is the	current comprehensive plan designation of the site?
	Long-term	forestry.
g.	If applicabl	le, what is the current shoreline master program designation of the site?
	Does not a	pply.
h.	Has any pa	rt of the site been classified as an "environmentally sensitive" area? If so, specify.
	Does not a	pply.
i.	Approxima	tely how many people would reside or work in the completed project?
	Does not a	pply.
j.	Approxima	tely how many people would the completed project displace?
	Does not a	pply.
k.	Proposed n	neasures to avoid or reduce displacement impacts, if any:
	Does not a	pply.
1.	Proposed m	neasures to ensure the proposal is compatible with existing and projected land uses and plans, if any:
		Done Timer Sale has been laid out in accordance with the current DNR Forest Resource Plan (July 1992), (September 1997), and current Forest Practices rules as they apply in conjunction with current land use ons.
Housing	g	
a.	_	tely how many units would be provided, if any? Indicate whether high, middle, or low-income housing.
	Does not a	
b.		tely how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.
	Does not a	
c.		neasures to reduce or control housing impacts, if any:
	Does not a	
Aesthet	ics	
a.	What is the material(s)	tallest height of any proposed structure(s), not including antennas; what is the principle exterior building proposed?
	Does not a	pply.
b.	What views	s in the immediate vicinity would be altered or obstructed?
	1)	Is this proposal visible from a residential area, town, city, developed recreation site, or a scenic vista? □No ⊠Yes, viewing location:
		Possible portions of this proposal may be visible from Doty.
	2)	Is this proposal visible from a major transportation or designated scenic corridor (county road, state or interstate highway, US route, river, or Columbia Gorge SMA)? □No ⊠Yes, scenic corridor name:
		Possible portions may be visible from Doty.
	3)	How will this proposal affect any views described in 1) or 2) above?
		The timber harvest activity may alter the middle-ground to back-ground view of the forest structure. However, it is consistent with other past and recent forest practice activities in this area and should blend in with the overall view.

9.

10.

c. Proposed measures to reduce or control aesthetic impacts, if any:

Retention tree clumps and individually scattered trees will remain following the proposed harvest to reduce the visual impacts of the harvest. Riparian Management Zones averaging 175 feet wide along five type 3 streams will reduce the visual impacts to the area. The site will be replanted after harvest or will be allowed to regenerate naturally.

11. Light and Glare

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

Does not apply.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

Does not apply.

c. What existing off-site sources of light or glare may affect your proposal?

Does not apply.

d. Proposed measures to reduce or control light and glare impacts, if any:

Does not apply.

12. Recreation

a. What designated and informal recreational opportunities are in the immediate vicinity?

Dispersed informal recreation in the form of hunting, berry picking, sightseeing, etc.

b. Would the proposed project displace any existing recreational uses? If so, describe:

Recreation will be temporarily displaced during logging operations on the timber harvest area.

 Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:

None.

13. Historic and Cultural Preservation

a. Are there any places or objects listed on, or proposed for national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

None have been identified.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None have been identified.

c. Proposed measures to reduce or control impacts, if any:
(Include all meetings or consultations with tribes, archaeologists, anthropologists or other authorities.)

None.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

This proposal will use forest roads, accessed by Chandler Road (county road).

1) Is it likely that this proposal will contribute to an <u>existing</u> safety, noise, dust, maintenance, or other transportation impact problem(s)?

No

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

No.

c. How many parking spaces would the completed project have? How many would the project eliminate?

Does not apply.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

See A.11.

1) How does this proposal impact the overall transportation system/circulation in the surrounding area, if at all?

This proposal will increase the traffic by up to 20 vehicle and log truck round trips per day and should not affect the overall transportation system in the area.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Up to 20 round trips per day could occur during road building and logging operations. After harvest activities are complete, occasional vehicular trips to the site will be generated for future forest management purposes.

g. Proposed measures to reduce or control transportation impacts, if any:

None.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

Does not apply.

b. Proposed measures to reduce or control direct impacts on public services, if any.

Does not apply.

16. Utilities

a. Circle utilities currently available at the site: electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other.

Does not apply.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

Does not apply.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Completed by: <u>Dale Kysar Forester I</u>	_Date: _ <u>03/25/04</u>
Reviewed by:	_Date: